

Personalized Medicine: To invest or not to invest? *A Perspective from Sand Hill*

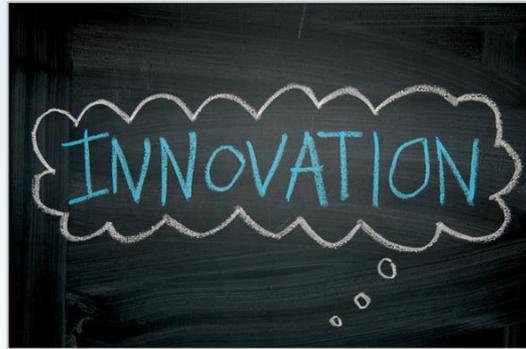
Sand Hill Road ↗
Exit

**Facilitating Development and Utilization of Genome-
Based Diagnostic Technologies: A Workshop**

**Institute of Medicine
November 15, 2011**

SUE SIEGEL
MOHR DAVIDOW


Why the VC Community Matters



VC community plays a crucial role in the economy, spurring innovation, that benefits the quality and efficiency of our healthcare system

2010:

- **VC-backed companies generated revenue equal to 21% of the U.S. GDP**
- **~12M jobs at VC-backed companies led to \$3.1T in revenue (10% of total 2010 U.S. sales)**
 - **74% of biotechnology jobs are within VC-backed companies**
 - **80% of revenue in biotechnology is from VC-backed companies**

Source: National Venture Capital Assoc.

"Venture Impact: The Economic Importance of Venture Backed Companies to the US Economy." 5th Edition.

© 2011 Mohr Davidow Ventures – Do Not Duplicate

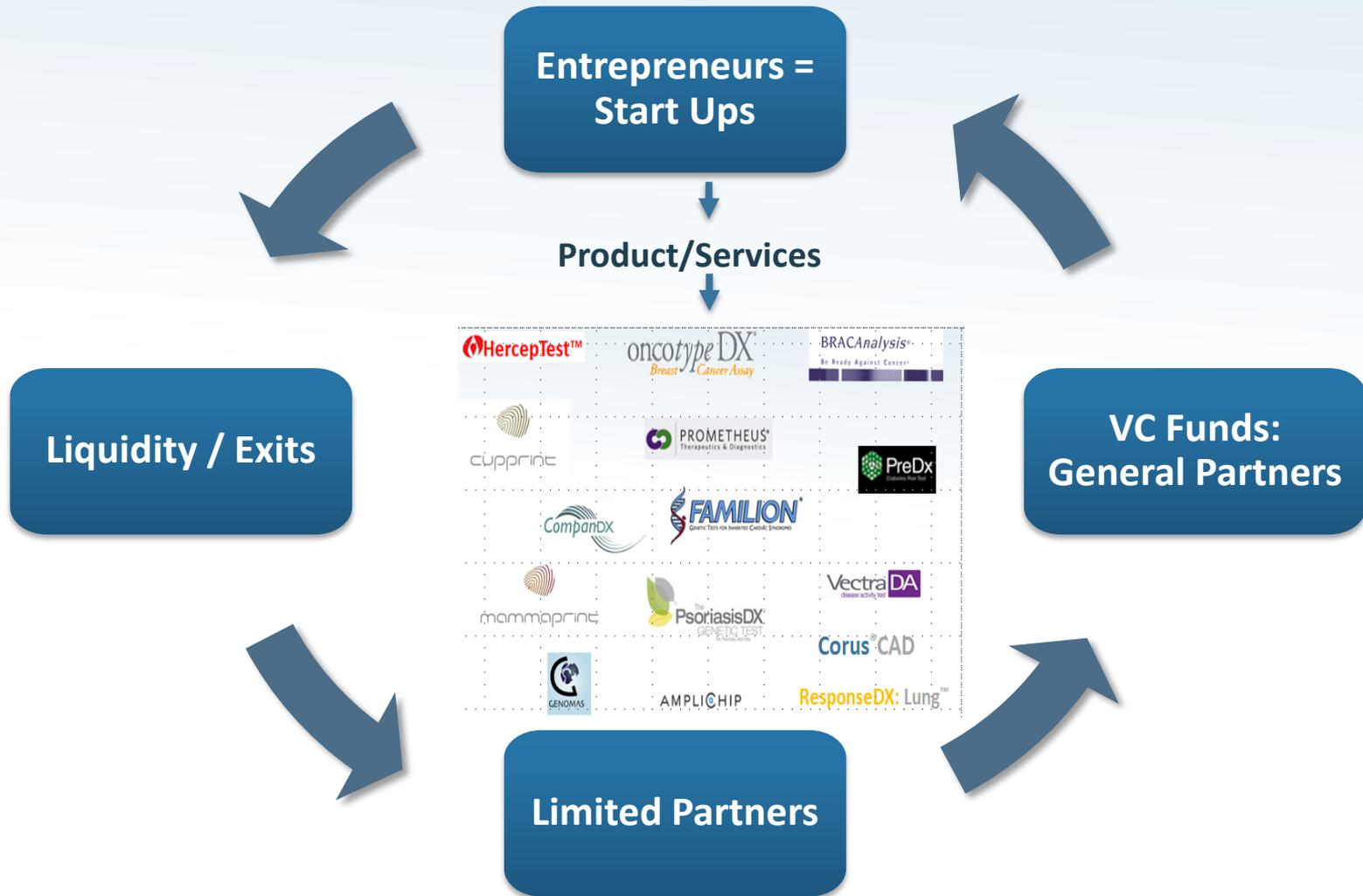
Molecular Diagnostics: Job Creation



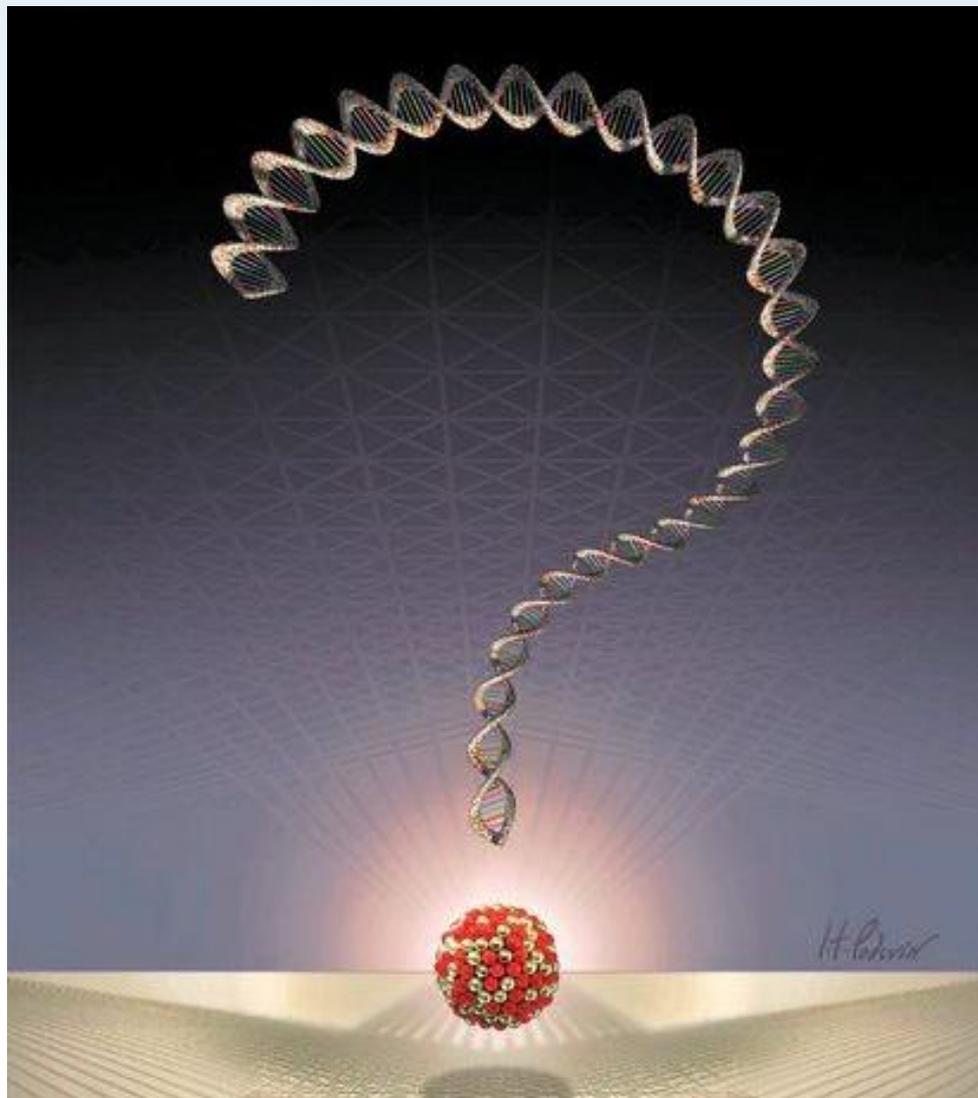
- In 2008, ~330,000 clinical lab technologist and technician jobs
- Industry projected to add 50,000 more jobs over the next decade

Source: U.S. Bureau of Labor Statistics

Venture Process



How Do VCs Decide Where to Invest?



Credit: Science Photo Library

© 2011 Mohr Davidow Ventures – Do Not Duplicate

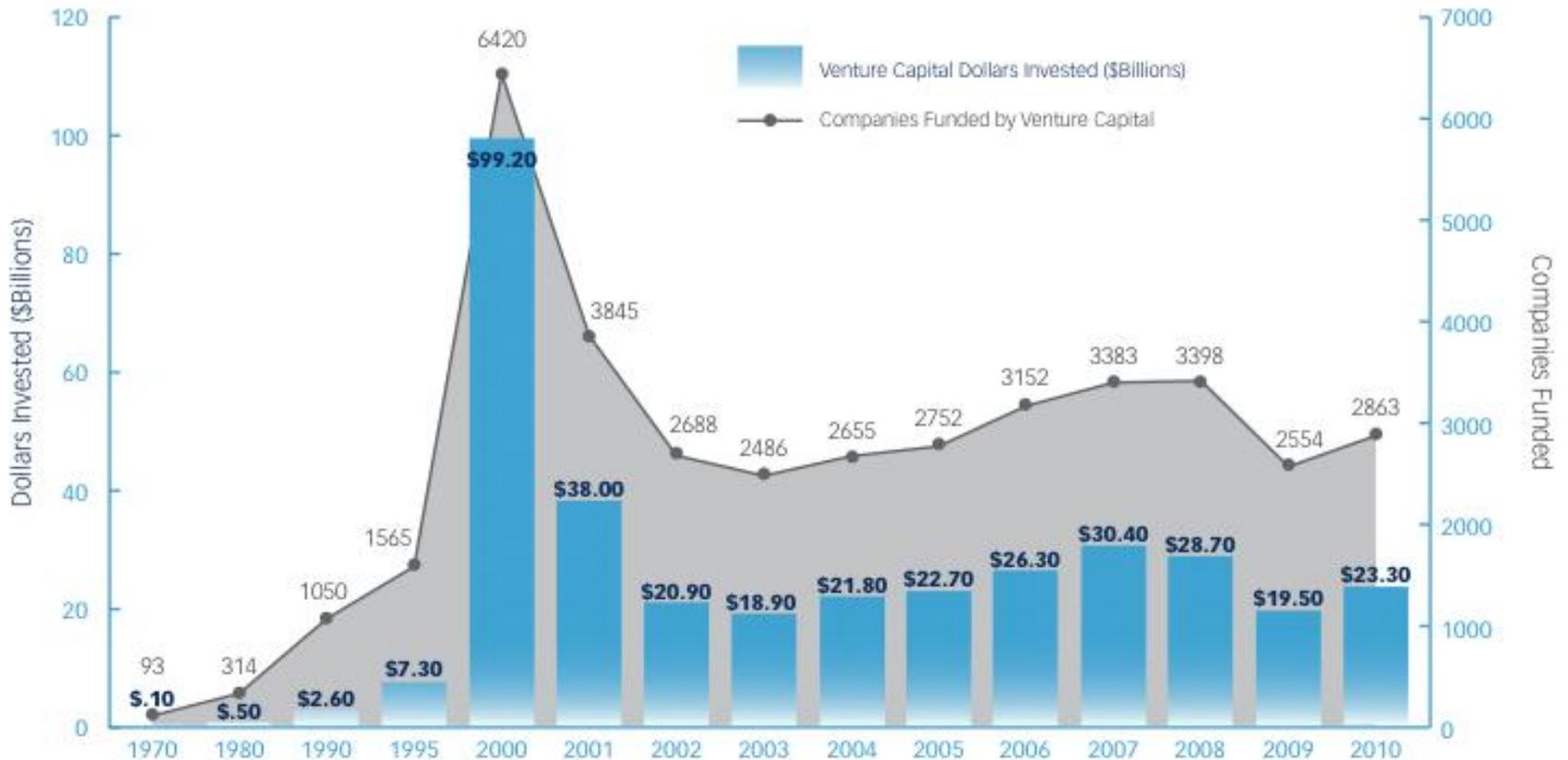
Mohr Davidow: Criteria for Investing in Personalized Medicine



- Invest in markets, people, tech
- Expect product in 3 – 5 years
- Capital-efficient business model
- Strong IP position
- Limited regulatory risk
- Clear reimbursement path(s)
- Strong health economics story

VC Investments are Decreasing

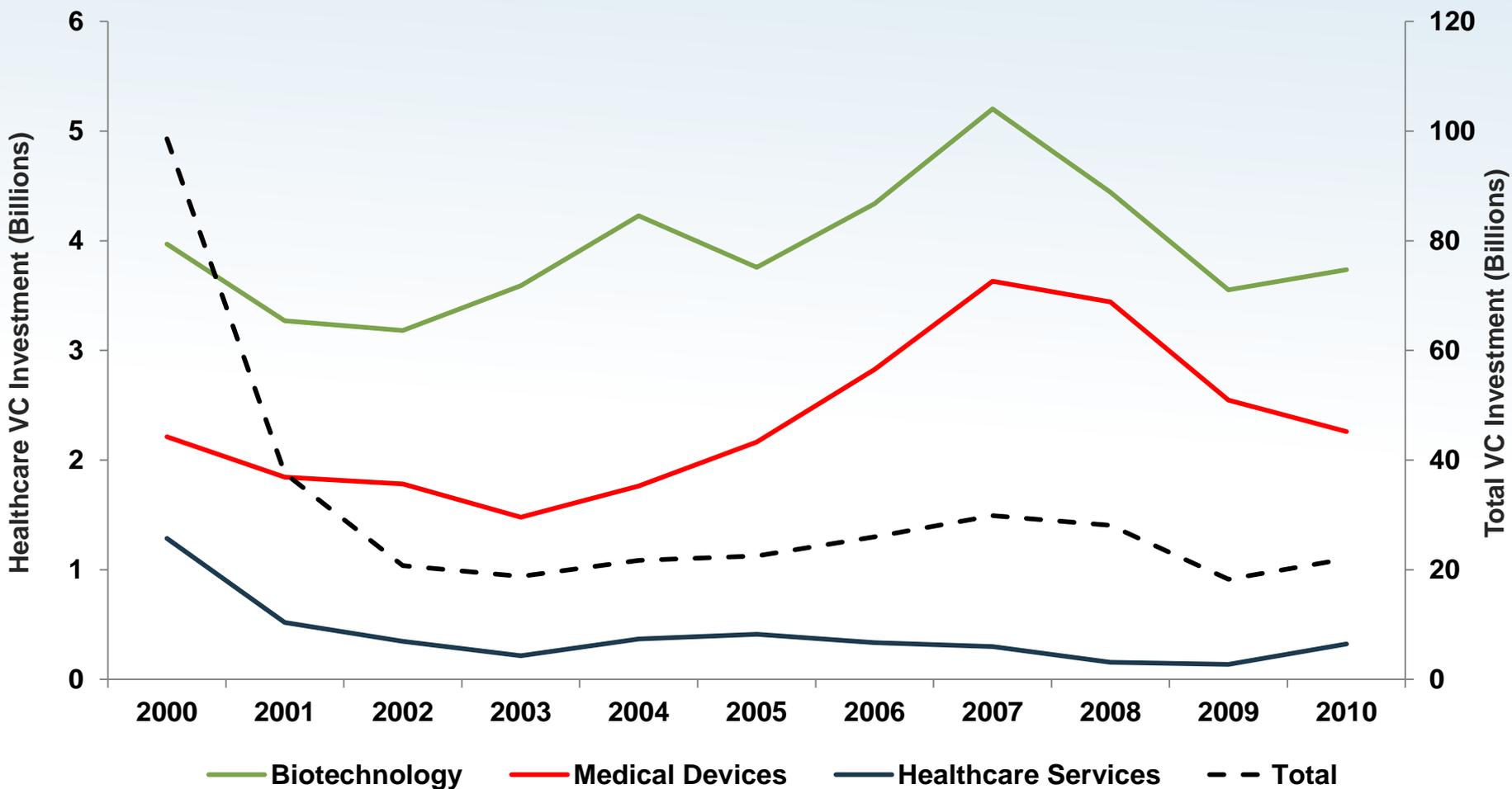
Venture Capital Investment in the United States 1970 – 2010



Source: National Venture Capital Assoc.

“Venture Impact: The Economic Importance of Venture Backed Companies to the US Economy.” 5th Edition.

VC Investment in LS/HC Category Decreasing



Source: National Venture Capital Assoc. 2011 Yearbook.

NVCA Survey: 150 VCs on Life Sciences Investing

40% Percentage of VCs who decreased life sciences investments in the past three years

40% Plan to decrease their investments in the next three years

60% Percentage who indicated regulatory challenges as having the most impact on their investment decisions

40% Percentage who indicated they plan to increase investments in Europe and Asia

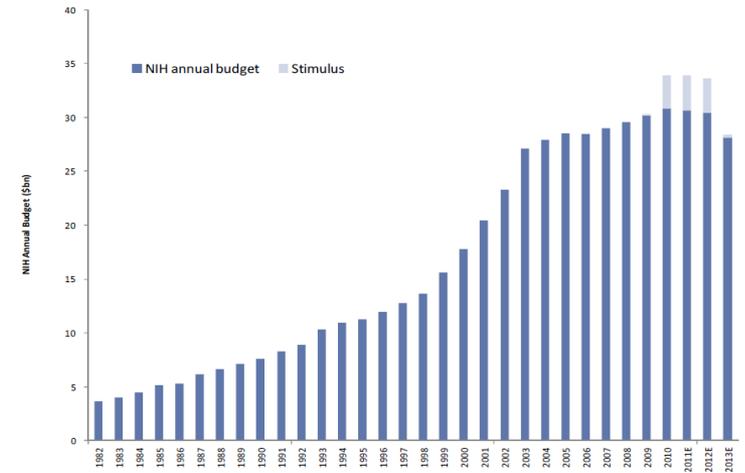
Almost all VCs indicated that better predictability and increased efficiency would positively impact their investments in the U.S.

Source: National Venture Capital Assoc. "Vital Signs: The Threat to Investment in the U.S. Medical Innovation and the Imperative of FDA Reform." 2011.

Market Dynamics



Exhibit 5: With the majority of stimulus funds spent, 2012 & 2013 face funding headwinds
NIH annual budget (\$bn) and ARRA stimulus funds estimated allocation, FY1982-FY2013E



Source: Goldman Sachs Research, OMB



Investing Hurdles



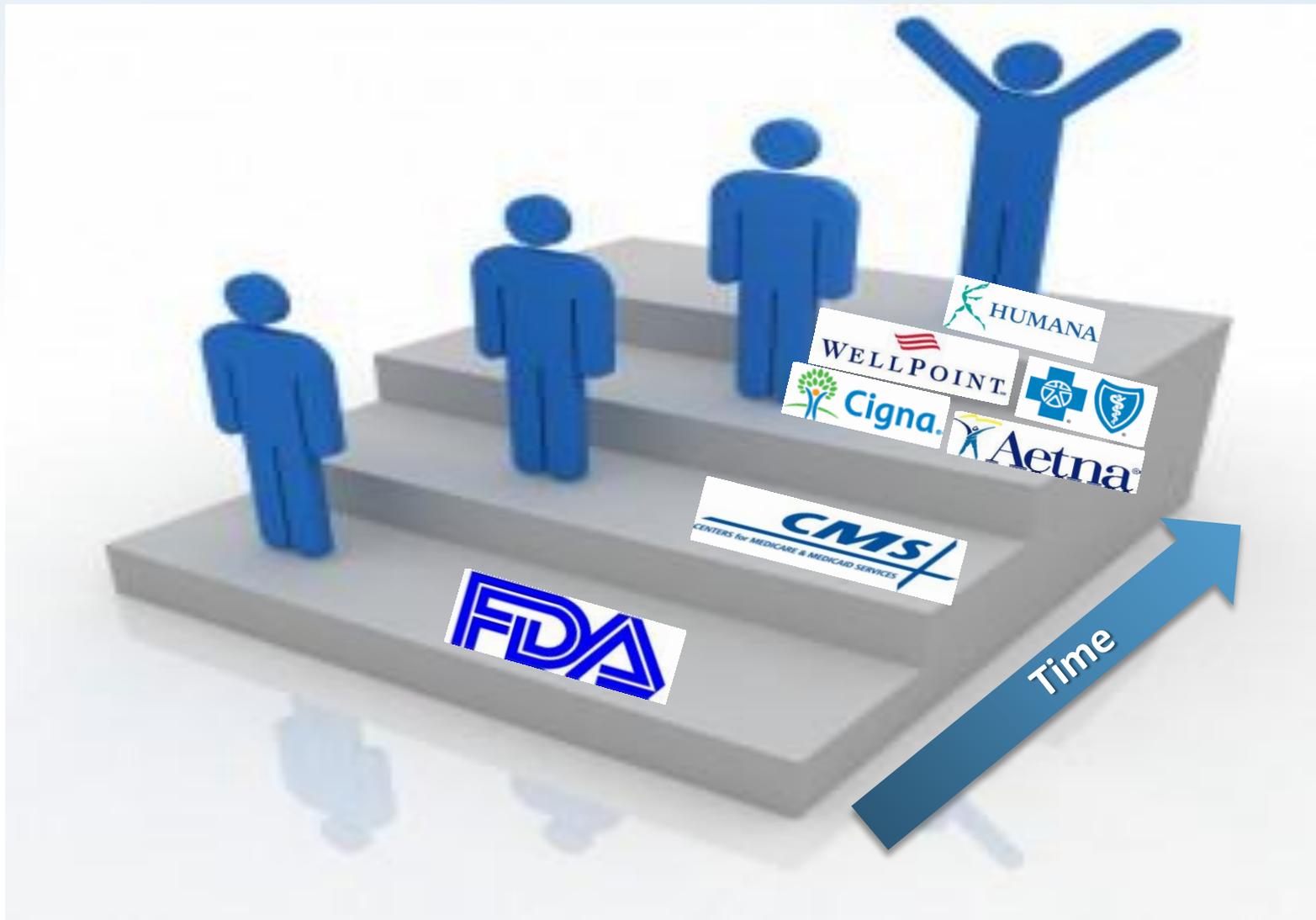
Common Goal: Safety & Efficacy



Sisyphean Effort



Approval & Coverage: Need Predictable, Efficient Pathway



What is Needed for Increased VC Investment?



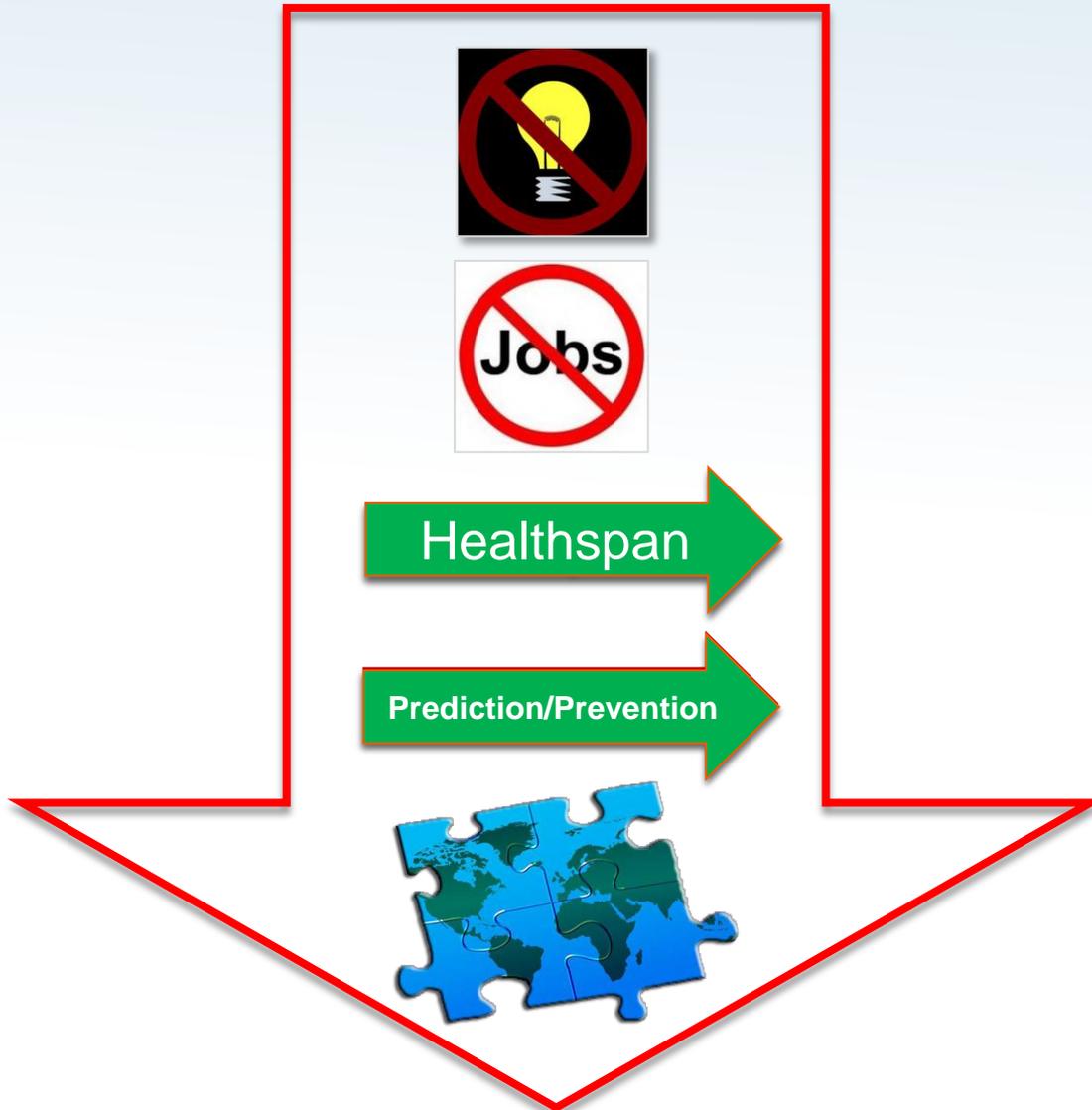
NIST



World Health Organization



Summary - Implications



- Innovation
- Job growth is slowed
- Healthcare transition to healthspan and prevention doesn't take hold
- National competitiveness is eroded

Summary – For Consideration



N|V|C|A

National Venture Capital Association



- **Leadership**
- **Clear approach to oversight**
- **Include VC voice**
- **Forums with all stakeholders**

Thank You

Sue Siegel

ssiegel@mdv.com